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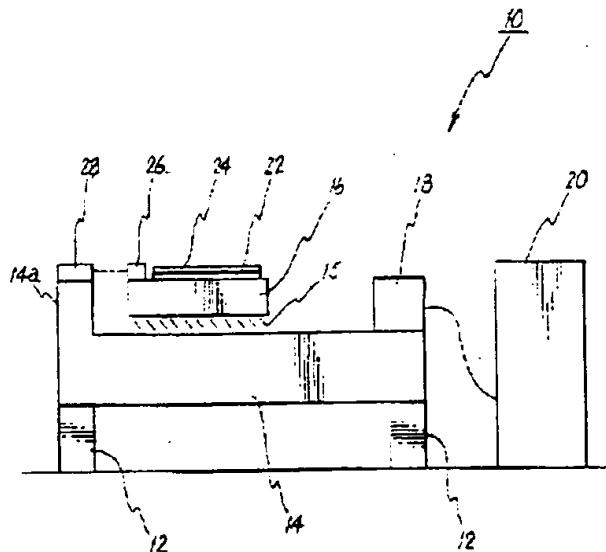
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TITLE : COMMAND VALUE DETERMINING
METHOD AND STAGE DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To reduce the swing of a vibration-isolation table by a method wherein a command value to a stage is so determined as to have the swing of the vibration-isolation table at least in one direction among a direction of the stage movement of the vibration-isolation table and a direction opposite to that direction immediately after the transfer start accelerated and have the swing speed zero at the initial position immediately after the acceleration.

SOLUTION: When a large thrust command value is given to the driving part 18 of a linear motor when the transfer of a stage 16 is started, a surface plate (vibration-isolation table) 14 is displaced in a direction opposite to the transfer direction of the stage 16 by the counter force against the thrust of the stage 16. After that, the thrust command value is once turned to be zero and, immediately before or after the movement direction of the surface plate 14 is reversed in the same transfer direction of the stage 16, a negative thrust which reduces the acceleration of the stage 16 is applied to the driving part 18. In this case, the swing in a positive direction which is the same as in the direction of the stage 16 is accelerated by the negative thrust and the surface plate 14 is returned to the initial position quickly. With this constitution, the swing of the surface plate 14 can be reduced and the relative displacement between the stage 16 and the surface plate 14 can be reduced, so that the high precision positioning can be realized.

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